IN THE UNITED STATES PATENT AND TRADEMARK OFFICE APPLICATION FOR UNITED STATES PATENT

In re Pate	ent Application of	}
Louis N.	Koppel et al.)
Appin. N	o. 09/527,389)
Filed: M	arch 16, 2000)
For:	CALIBRATION AND ALIGNMENT OF X-RAY REFLECTOMETRIC SYSTEMS))

Group Art Unit: 2876

POWER OF ATTORNEY BY ASSIGNEE AND CERTIFICATE BY ASSIGNEE UNDER 37 CFR § 3.73(b)

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Therma-Wave, Inc., assignee of the entire right title and interest in the above-identified application by assignment dated March 20, 2000 and March 29, 2000, which assignment is recorded in the Patent and Trademark Office at Reel 010918, frame 0317, hereby appoints the members of the firm of LIMBACH & LIMBACH L.L.P., a firm composed of:

Karl A. Limbach	18,689	Alfred A. Equitz	30,922	Michael R. Ward	38,651
George C. Limbach	19,305	Charles P. Sammut	28,901	Charles L. Hamilton	42,624
John K. Uilkema	20,282	Mark C. Pickering	36,239	Andrew V. Smith	43,132
Neil A. Smith	25,441	Patricia Coleman James	37,155	Eric N. Hoover	37,355
Veronica C. Devitt	29,375	Kathleen A. Frost	37,326	Frank J. Mycroft	P-46,946
Ronald L. Yin	27,607	Alan A. Limbach	39,749	Parisa Jorjani	P-46,813
Gerald T. Sekimura	30,103	Douglas C. Limbach	35,249	Robert M. McConnell	46,912
Michael A. Stallman	29,444	Seong-Kun Oh*		J. Thomas McCarthy	22,420
Philip A. Girard	28,848	Cameron A. King	41,897	Joel G. Ackerman	24,307
Michael J. Pollock	29,098	Kyla L. Harriel	41,816	Roger S. Sampson	44,314
Stephen M. Everett	30,050	Mayumi Maeda	40,075	Susan M. Schmitt	34,427
•		* Recognition under 37 CFR 10.5	9(b)	Edward B. Weller	37,468

as its attorneys with full power of substitution to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith.

The assignee certifies that it has reviewed the assignment and to the best of the assignee's knowledge and belief, title is in the assignee.

Please direct all correspondence regarding this application to the following:

LIMBACH & LIMBACH L.L.P. Attn: Eric N. Hoover 2001 Ferry Building San Francisco, CA 94111

Telephone: (415) 433-4150 Facsimile: (415) 433-8716

Dated: 9-20-00

Therma-Wave, Inc.

By: Name:

Martin Schwartz

Title: Chief Executive Officer

Atty Docket No. TWI-11700

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship ar as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

patent is sought on the inve	ntion entitied	•	
CALIBRATION AND ALIGNM	ENT OF X-RAY REFLECTOR	METRIC SYSTEMS	
the specification of which (capplication No. $\frac{09}{527,3}$	heck one) is attached h	nereto or <u>X</u> was filed on <u>March</u> id was amended on (if appli	n 16, 2000 as cable).
hereby state that I have rev noluding the claims, as ame		contents of the above-identified eferred to above.	specification,
acknowledge the duty to d § 1.56.	isclose all information whic	ch is material to patentability as d	lefined in 37 CFR
application(s) for patent or i designated at least one cour	nventor's certificate, or § 3 ntry other than the United (atent or inventor's certifica	§ 119(a)-(d) or § 365(b) of any 865(a) of any PCT International a States, listed below and have als ate having a filing date before tha	oplication which oidentified below
Prior Foreign Application(s)	i		Priority Claimed Yes No
Number	Country	Day/Month/Year Filed	
Number	Country	Day/Month/Year Filed	
I hereby claim the benefit u	nder 35 U.S.C. § 119(e) of	any United States provisional ap	pplication(s) below.
Application Number	Filing Date	<u> </u>	
Application Number	Filing Date		
PCT International application of each of the claims of the provided by the first paragraph which is material to patent.	on designating the United S is application is not disclose raph of 35 U.S.C. § 112, I ability as defined in 37 CFR	ny United States application(s), of tates, listed below and, insofar a sed in the prior United States applications acknowledge the duty to disclose \$ 1.56 which became available international filing date of this appropri	s the subject matt ication in the mann e all information between the filing
Application Number	Filing Date	Status: Patented, Pendir	ng, Abandoned
Application Number	Filing Date	Status: Patented, Pendir	ng. Abandoned

\PATENTS\DECLARTN.MRG

I hereby declare that all statements mad herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements w r made with the knowl dge that willful false stat ments and the like so made are punishable by fine or imprisonment or both, und r 18 U.S.C. § 1001 and that such willful false stat m nts may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Louis N. Koppel
Inventor's signature
Residence 308 Waverley Street, #4, Menlo Park, CA 94025
Citizenship U.S.A.
Post Office Address 308 Waverley Street, #4, Menlo Park, CA 94025
Full name of second joint inventor, if any, Craig E. Uhrich
Inventor's signature (129/200) Date Date
Residence 202 Rutherford Avenue, Redwood City, CA 94061
Citizenship U.S.A.
Post Office Address 202 Rutherford Avenue, Redwood City, CA 94061
Full name of third joint inventor, if any, Jon Opsal
Inventor's signature Tank 20, 2000
Date
Residence 2295 Norwood Road, Livermore, CA 94550 Citizenship U.S.A.
Post Office Address 2295 Norwood Road, Livermore, CA 94550
I OUL OTHOU MUDICOO EEOO HUHWUUU HUUU, LIVCHHUIC, CM 3400U



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS. Washington, D.C. 20231

SEPTEMBER 26, 2000

LIMBACH & LIMBACH L.L.P. ERIC N. HOOVER / MAS 2001 FERRY BUILDING SAN FRANCISCO, CA 94111 PTAS

CORRECTED NOTICE



OCT 0 2 2000

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

LIMBACH & LIMBACH L.L.P

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/21/2000

REEL/FRAME: 010918/0317

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KOPPEL, LOUIS N.

DOC DATE: 03/20/2000

ASSIGNOR:

UHRICH, CRAIG E.

DOC DATE: 03/29/2000

ASSIGNOR:

OPSAL, JON

DOC DATE: 03/20/2000

ASSIGNEE:

THERMA-WAVE, INC. 1250 RELIANCE WAY FREMONT, CALIFORNIA 94539

SERIAL NUMBER: 09527389

PATENT NUMBER:

FILING DATE: 03/16/2000

ing the state of t

ISSUE DATE:

DIANE RUSSELE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS FORM PTO-1595 1-31-92 07-20-2000



101408273

(P. 31.00)

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

To the Commissioner of Patents and Trademai documents or copy thereof. JUN 21 Name and address of receiving party(ies): Name of conveying party(ies): PH 12: 45 Louis N. Koppel Craig E. Uhrich OPR/FINANCE Name: Therma-Wave, Inc. Jon Opsal Internal Address: Additional name(s) of conveying party(ies) attached? Street Address: 1250 Reliance Way Yes City, State and Zip: Fremont, CA 94539 Nature of Conveyance: Additional Name(s) & address(es) attached? Yes X No Assignment Merger Security Agreement Change of Name Other Execution Date: 3/20/2000; 3/29/2000; 03/20/2000 Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: Patent Application No.(s) B. Patent No.(s) 09/527,389 Additional numbers attached? Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: 1 document should be mailed: Name: Eric N. Hoover 7. Total fee (37 CFR 3.41):.....\$ 40.00 Enclosed Internal Address: Limbach & Limbach L.L.P. Charge any deficiencies in the enclosed fee to Street Address: 2001 Ferry Building Deposit Account No. 12-1420 City, State, ZIP: San Francisco, California 94111 Authorized to be charged to deposit account Telephone: (415) 433-4150 Facsimile: (415) 433-8716 8. Deposit account number: 12-1420 Attorney Docket No. TWI-11700 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Eric N. Hoover, Reg. No. 37,355 Name of Person Signing

07/20/2000 NTHAII 00000012 09527389

01 FC:581 40.00 GP

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Total number of pages including cover sheet, attachments and document: 3

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20213, and to the Office of Management and Budget, Paperwork Reduction Project, (0651-0011), Washington, D.C. 20503

ASSIGNMENT

WHEREAS, WE, Louis N. Koppel, Craig E. Uhrich, Jon Opsal, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: CALIBRATION AND ALIGNMENT OF X-RAY REFLECTOMETRIC SYSTEMS Application (Declaration/Oath) Execution Date: March 20, 2 Filing Date: March 16, 2000 Application No.: 09/527,389 29.

WHEREAS, Therma-Wave, Inc., a corporation of the State of Delaware, 1250 Reliance Way, Fremont, CA 94539 hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title and interest in the said invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, prolongations or extensions thereof, said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignors had this assignment and transfer not been made, to the full end and term of any such Letters Patent.

Assignors further agree that they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

personally appeared personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my beind and official seal

of Notary

BURNARIA BU

LESLIE J. REED COMM. #1131450 NOTARY PUBLIC - CALIFORNIA ALAMEDA COUNTY My Comm. Exp. Mar. 25, 2001

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated
below.
Date: MARCH Z9, Z000 Croing Ching
Craig E. Uhrich
State of algorna
County of <u>Clameda</u>
On 3-29-00 before me, LESLIE J. REED
personally appeared CRAIGE. Whrich personally known to me or proved to me on the basis of
satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
WITNESS my rand and official seal.)
Tille Star Co
Signature of Notary
SEAL
·
IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.
below.
below.
below.
below.
below.
Date: March 70, 2000 Jon Opsal State of California County of Calameda
Date: March 70, 2000 Jon Opsal State of California
Date: March 70, 2000 Jon Opsal State of California County of Calameda
Date: Marin 10, 2000 Jon Opsal State of California County of Clameda On 3-21-00 before me, LESLE J. REDD personally appeared JON OPSAL personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged
Date: Marin 10, 2006 State of California County of Clameda On 3-21-00 before me, LESLE J. REED personally appeared JON OFAL personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s)
Date: March 10, 1000 State of California County of Cou
Date: Man 10, 1000 State of County
Date: Man 70, 1000 State of California County of Count
Date: Man 10, 1000 State of County